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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,501	09/12/2003	Shing-Jy Shyu		5637

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TROXELL LAW OFFICE PLLC  
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SUITE 1404  
FALLS CHURCH, VA 22041

EXAMINER
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CHORBAJI, MONZER R

ART UNIT	PAPER NUMBER
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1744

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/660,501

Applicant(s)

SHYU, SHING-JY

Examiner

MONZER R. CHORBAJI

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08/24/2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

**This final action is in response to the amendment received on 08/24/2006**

#### ***Claim Objections***

1. Claim 2 is objected to because of the following informalities: in line 13, replace "a" with "an" and in line 15, also replace "a" with "an". Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bucher et al (U.S.P.N. 5,302,083) in view of Laurel (U.S.P.N. 4,402,649), Lee et al (US 2003/0095902 A1) and Eisenhardt, Jr. (U.S.P.N. 4,422,824).

Bucher discloses a fan that includes the following: an upper cover (figure 4:12), a lower cover (figure 4:14), a controller having a cord controllable switch (figure 4:28 and

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30), a motor (figure 4:24) located between the upper cover and the lower cover, the controller controlling the motor (figure 4:32), a securing annular plate (figure 4:16) located between the upper cover and the lower cover, the plate (figure 4:16) includes a plurality of protruding pieces (unlabeled protruding holes in 16 in figure 1) where each of the protruding pieces has a protruding piece screw hole, the plate includes a groove located on each of the top and the bottom (figure 4:74 and 76) where an outer periphery of the upper cover is inserted into the groove located on the top of the plate (figure 4:70) and an outer periphery of the lower cover is inserted into the groove located on the bottom of the plate (figure 4:72), a light ray tube (figure 4:18) surrounding the motor, light ray tube (figure 4:18) located between the upper cover and the lower covers (figure 4:12, 14 and 18), a light ray tube controller (figure 4:96), a plurality of screws (unlabeled screws in figure 4) connecting the upper cover to the lower cover where the screws are inserted through the protruding piece screw holes (unlabeled screws in figure 1) and a plurality of fan blades (figure 4:26) controlled by the motor (col.4, lines 1-5). Bucher fails to teach the use of driver located on top of the upper cover, the use of plurality of hook rings, the use of a cathode ray light tube and where the upper and lower covers are made of UV protective material. Laurel teaches the use of a driver (figure 1:16 and col.1, lines 49-52) located on top of the upper cover (figure 1:16 and 26) and the use of plurality of hook rings (figure 3:76). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Bucher fan by including a driver located on top of the upper cover as taught by Laurel so that the lamp starter is kept at high distance where it is only accessed by trained technicians

and to further add hook rings as taught by Laurel in order to precisely control the position of the lamp between the upper and the lower covers.

Laurel fails to teach the use of a cathode ray light tube and where the upper and lower covers are made of UV protective material. Lee discloses the use of a circular cathode ray light tube (figure 3:40) that generates UV light. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Bucher fan assembly by substituting Laurel UV lamp for the neon lamp in order to purify air (Lee, paragraph 0004).

Lee fails to teach that the upper and lower covers are made of UV protective material. Eisenhardt teaches that UV is harmful to human eyes (col.2, lines 65-68 and col.3, lines 1-4) and places baffles made of material that prevents UV light from spreading outside of the interior of the volume of the fan blade (col.1, lines 56-62). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the construction material of Bucher upper and lower covers by incorporating material that confines UV light within a certain space as taught by Eisenhardt so that UV rays harmful to humans is prevented from escaping to the areas outside the lamp assembly (Eisenhardt, col.2, lines 66-68).

### ***Response to Arguments***

5. Applicant's arguments with respect to claim 2 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Dai (U.S.P.N. 5,847,514), Liu (U.S.P.N. 5,422,795), Bucher et al (U.S.P.N. 6,558,124) and Reiker (U.S.P.N. 6,477,321) all teach the utilization of a securing annular plate while Kendregan et al (U.S.P.N. 5,028,206) teaches the use of hooks for holding circular lights. Morgan, Jr. (U.S.P.N. 5,853,676) teaches the use of circular UV lamps in the art of sterilizing fluids.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


8. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MONZER R. CHORBAJI whose telephone number is (571) 272-1271. The examiner can normally be reached on M-F 9:00-5:30.

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, GLADYS J. CORCORAN can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MRC

  
GLADYS J. CORCORAN  
SUPERVISORY PATENT EXAMINER